

Dec. 8, 2014

California Energy Commission

Dockets Office, MS-4

Re: Docket No. 14-IEP-1

1516 Ninth Street

Sacramento, CA 95814-5512

Subject: Comments of Volvo Group North America on California Energy Commission Draft 2014 EIPR Update.

To whom it may concern,

Volvo Group North America (“Volvo”) appreciates the opportunity to provide comments on the California Energy Commission’s (“CEC”) Draft 2014 EIPR Update (“Report”).

Volvo first would like to acknowledge the work of the CEC staff. The EIPR Update is a broad and comprehensive document covering a significant swath of the state’s energy policy. Our staff has appreciated the willingness of the CEC to discuss both current and possible future projects that have the potential of aiding the transformation of the transportation sector envisioned in the Report. Volvo will limit its comments to the sections of the report dealing with the areas of the transportation sector in which Volvo participates in the United States – heavy-duty trucks, buses, construction equipment and advanced transportation solutions such as telematics and electrification.

Volvo Group North America is part of an international company, Volvo Group, one of the world’s largest manufacturers of heavy-duty trucks, buses and construction equipment, and is a leading manufacturer of heavy-duty diesel engines and marine and industrial engines. We are dedicated to bringing transportation solutions into the business sectors in which we participate. Our mission includes “using our combined expertise to create transport-related products and services of superior quality, safety and environmental care for demanding customers in selected segments.”

(<http://www.volvogroup.com/group/global/en-gb/productsandservices/pages/productsandservices.aspx>). We produce a broad range of trucks, construction equipment and buses that are in use in California and throughout the world.

As the IEPR notes, California’s transportation fleet of 26 million passenger vehicles and light trucks, as well as 1 million medium- and heavy-duty trucks, run primarily on liquid fuels – 13 billion gallons of gasoline and 3.4 billion of diesel fuel in 2013. Burning these fossil fuels creates greenhouse gas emissions (GHG) as well as particulate matter (PM) and oxides of nitrogen (NOx).

The IEPR discusses the technology transformation desired by the state to “address the threats of climate changes and meet more stringent federal air quality standards in the state.”

Volvo is a participant in this transformation, working on its own, with the federal government on the SuperTruck program and with the state of California on various programs to develop and validate technology that can aid this transformation. California projects include:

- Two plug-in hybrid drayage trucks projects in Southern California with South Coast AQMD, CALSTART and CEC
- A hybrid wheel loader project with CALSTART and CEC
- A vehicle platooning project with the Federal Highway Administration (FHWA) and UC Berkeley
- DME (dimethyl ether) demonstrator trucks with the San Joaquin APCD and Safeway
- An ultra low-NOx engine emissions research project with Southwest Research (SWRI), Truck and Engine Manufacturers Association and CARB.
- Siemens catenary project for I-710 with South Coast AQMD

While vested in transport technology transformation, Volvo would caution the CEC that technology demonstration through pilot project completion is less than 10 percent of the overall cost and time needed to bring a product to market. We also are firm in our belief that customer solutions, not specific technologies, need to be brought to the market. Demonstration projects are not the final step in bringing a product and a service to market. But they do help build a business case for including a technology in the products and services that are eventually brought to market.

Proof of technology is only one of many factors influencing the decision to incorporate it into a commercialized product. Others include market size, production capacity, customer return on investment (ROI), corporate resource priorities and regulatory demands. Differences in product applications, duty cycles and market volumes, among other factors, greatly restrict the direct application of technologies across products and markets.

Finally, Volvo's business experience has shown that the most significant, practical and cost-effective vehicle improvements require a system integration/complete vehicle approach.

As the IEPR notes in Chapter 1 "Meeting California's Climate, Air Quality, and Energy Goals Requires Transformation in the Transportation Sector," the CEC has been "Investing in a Portfolio of Strategies" (p.17) in order to ensure consistent progress. Volvo concurs with that strategy and wishes to underscore the importance of further advances and efficiency improvements to existing diesel technology as a way to simultaneously expedite the realization of emission reductions and the best utilization of transformational technologies that will likely take longer to implement. As a result, Volvo encourages the CEC to invest in existing technology improvements as well as riskier, long-term transformational technology.